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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,154	07/30/2001	Riccardo G. Dorbolo	062891.0598	2953
7590	04/18/2005		EXAMINER KADING, JOSHUA A	
Baker Botts L.L.P. Suite 600 2001 Ross Avenue Dallas, TX 75201-2980			ART UNIT 2661	PAPER NUMBER

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,154

Applicant(s)

DORBOLO, RICCARDO G.

Examiner

Joshua Kading

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☒ Claim(s) 38-46 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date 4-14-05.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claims 38-46 are objected to because of the following informalities:

As discussed with Keiko Ichiye on 14 April 2005, claims 38-46 should all be
5 made to depend from claim 37 instead of claim 34. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that
form the basis for the rejections under this section made in this Office action:

10 A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
15 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

3. Claims 1-47 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.
20 Patent 6,496,519 B1, Russell et al. (Russell).

Regarding claims 1, 11, 21, 27, 37, and 47, Russell discloses the method of
claim 1, the systems of claims 11, 27, and 47, the logic encoded media of claim 37 (*col.*
7, lines 42-45), and the switch of claim 21. Russell further discloses, "a plurality of
25 transmitting interfaces, least one transmitting interface comprising an Ethernet interface,
at least one transmitting interface comprising a SONET interface (*figure 2, elements*
200 and 203), each transmitting interface operable to: generate plurality synchronous

transport signal streams, at least one synchronous transport signal stream comprising Ethernet data, at least one synchronous transport signal stream comprising SONET data (*figure 2, element 200 where the Ethernet data is packaged into SONET frames so therefore there are synchronous transport streams with Ethernet and SONET data*);

- 5 negotiate with destination interface of a plurality of destination interfaces to determine a destination associated with each synchronous transport signal stream (*figure 9, multiplexers "4XE" and "IXE" are used to negotiate to which endpoint the data is to be transmitted*); record the destination in a transport overhead the associated synchronous transport signal stream (*figure 4, where the overhead section must contain the*
- 10 *destinations because the multiplexers must know where the data is to be sent and this is found in the destination*); and a switch coupled to the transmitting interfaces (*figure 5, element 503 as detailed in figure 2 which also acts as a switch*) and comprising: an input operable receive the synchronous transport signal streams (*figure 5*); a monitor coupled to the input operable receive the synchronous transport signal streams from the
- 15 input, and to determine time slot and a destination interface from the destination recorded in the transport overhead of a synchronous transport signal stream (*figure 2, element 201 as described in col. 7, lines 34-45 where the device is working to put the Ethernet data into a time division system as described in col. 5, lines 52-55*); control module coupled the monitor, the monitor operable to reconfigure the control module
- 20 (*figure 2, element 202 as described in col. 7, lines 52-col. 8, lines 1-9*); and a multiplexer coupled to the control module and operable to receive routing instruction from the control module, insert synchronous transport signal stream the determined time slot of

an outgoing system for switching data streams, synchronous transport signal stream, and to transmit the synchronous transport signal stream to the destination interface (*figure 2, element 200 as described in col. 8, lines 13-22 where the output of the multiplexer is sent across the network to the destination endpoints*)."

5

Regarding claims 2, 28, and 38, Russell discloses, "the means for generating the synchronous transport signal streams is operable to generate the synchronous transport signal streams at a transmitting interface (*figure 2, element 200*); and further comprising means for transmitting the synchronous transport signal streams to a switch (*figure 5*
10 *where data from element 503 is transmitted to switch element 505*)."

Regarding claims 3, 4, 12, 13, 29, 30, 39, and 40, Russell discloses, "wherein the means for determining the destination of a synchronous transport signal stream is operable to determine the destination by conducting a negotiation for the destination
15 between a transmitting interface and a destination interface (*figure 9, multiplexers "4XE" and "IXE" are used to negotiate to which endpoint the data is to be transmitted*)."

Regarding claim 5, 14, 31, and 41, Russell discloses, "wherein the means for recording the destination in the overhead of the associated synchronous transport
20 signal stream is operable to record the destination in a field of a transport overhead of the synchronous transport signal stream (*figure 4, where the overhead section must*

contain the destinations because the multiplexers must know where the data is to be sent and this is found in the destination)."

Regarding claims 6, 15, 32, and 42, Russell discloses, "determining the destination from the overhead of the synchronous transport signal stream (*figure 9, multiplexers "4XE" and "IXE" are used to negotiate to which endpoint the data is to be transmitted*); and configuring a switch to route the synchronous transport signal stream to the destination (*figure 2, element 202 as described in col. 7, lines 52-col. 8, lines 1-9*)."

Regarding claim 22, Russell discloses, "a multiplexer coupled to the control module and operable to multiplex at least two synchronous transport signal streams (*figure 2 as described in col. 6, lines 65-67*)."

Regarding claims 7, 8, 16, 17, 23, 24, 33, 34, 43 and 44, Russell discloses, "the monitor is operable to determine a time slot from the destination recorded in the overhead of a synchronous transport signal stream (*figure 9, multiplexers "4XE" and "IXE" are used to negotiate to which endpoint the data is to be transmitted and since this data comes from the synchronous network, the destination must be ascertained from the overhead*); and the multiplexer is operable to insert the synchronous transport signal stream in the time slot of an outgoing synchronous transport signal stream (*figure*

2, element 200 as described in col. 8, lines 13-22 where the output of the multiplexer is conformed to a time division network as described in col. 5, lines 52-55)."

Regarding claims 9, 18, 25, 35, and 45, Russell discloses, "a synchronous
5 transport signal stream comprises data based on a communications standard (*figure 2, SONET and Ethernet*); and the means for generating the synchronous transport signal streams is operable to generate the synchronous transport signal streams at an interface based on the communications standard (*figure 2, elements 200 and 203 where each receive and transmit data based on the corresponding communication standard*)."

10

Regarding claims 10, 20, 26, 36, and 46, Russell discloses, "each synchronous transport signal stream comprises a synchronous transport signal-level 1 stream (*figure 3, C-4, C-3, etc.*); and further comprising means for multiplexing the synchronous transport signal-level 1 streams to yield a synchronous transport signal-level n stream
15 (*figure 3, STM-N where the signals are all multiplexed into the STM-N stream*)."

Regarding claim 19, Russell discloses, "generate a plurality of synchronous transport signal streams (*figure 2, element 200 where the Ethernet data is packaged into SONET frames so therefore there are synchronous transport streams with Ethernet
20 and SONET data*); determine destination associated with each synchronous transport signal stream; and record the destination in an overhead of the associated synchronous transport signal stream (*figure 9, multiplexers "4XE" and "IXE" are used to negotiate to*

which endpoint the data is to be transmitted and this information must be recorded in the overhead content of the SONET packet as seen in figure 4)."

Conclusion

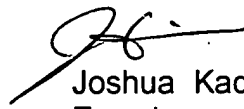
5 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,870,877 B2, Notani shows a unit of converting between different digital communications systems, including synchronous optical and electrical. U.S. Patent 6,014,708, Klish shows a specific Ethernet/SONET adapter for a communication system. U.S. Patent 6,597,689 B1, Chiu et al. shows an in depth system
10 that converts between digital data and optical data. U.S. Patent 6,501,758 B1, Chen et al. shows an ATM and TDM communication system sent over an optical fiber ring.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-
15 3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

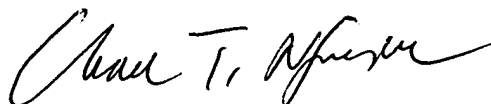
 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

- 5 For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Joshua Kading
Examiner
Art Unit 2661

10 April 14, 2005



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SUPERVISORY PATENT EXAMINER
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